TOM JACOB "IMPACT OF FOREIGN INVESTMENT FLOWS ON INDIAN ECONOMY IN THE POST LIBERALISATION ERA." THESIS. RESEARCH DEPARTMENT OF COMMERCE ST THOMAS' COLLEGE (AUTONOMOUS), UNIVERSITY OF CALICUT, 2019.

# Chapter 1

# Introduction

Mutual dependence between countries is as old as human civilization. From time immemorial countries seek different forms of capital either as aid, loan or investment from other countries. Globalization and the factors which accelerated this process - decolonization, the emergence of new states and their dependence on developed countries, development of international organizations like UNO, decline of communism, development of information technology etc. have revolutionized the quantity and quality of this mutual dependence. Now in the race of development, all the countries of the world, mutually recognizing and respecting their sovereignty, seek aid, loan or investments from other countries or invest in other countries in an unprecedented manner. If in the past, colonial powers (the present developed countries) were competing to invest in their colonies as part of their colonization, today the developing countries (the former colonies) are competing to receive investments from the developed countries.

In the present scenario, countries especially underdeveloped and developing prefer investments from foreign countries. These countries, allow foreign investments<sup>1</sup> in their countries generally in two ways i.e., Foreign Direct Investment known as FDI<sup>2</sup> and Foreign Portfolio Investment (investment in the capital market) known as FPI<sup>3</sup>. Foreign investment, widely known as non-debt capital,

<sup>&</sup>lt;sup>1</sup>Foreign investment has two aspects - the investment made by a country or its citizens in other countries as well as the investment received by a country from other countries and their citizens. It is in the latter sense foreign investment is commonly conceived and this study deals solely in this sense.

 $<sup>^{2}</sup>$ Foreign Direct Investment (FDI) is an investment in the form of controlling ownership in a business in one country by an entity based in another country.

<sup>&</sup>lt;sup>3</sup>Foreign Portfolio Investment (FPI) is investment by non-residents in Indian securities including shares,

is destined to play a crucial role in the economy of the host countries and many countries provide incentives for attracting foreign investment in their countries, acknowledging the serious dangers inherent in foreign investments. India is not an exception to this phenomenon. Since 1990 India kept the door of her economy wide open for foreign investment and even since billions of foreign capital is flowing to India in the form of FDI and FPI. Investment, whether it is domestic or foreign, is not an accidental occurrence. As far as foreign investment is concerned the circumstances of the home countries of the investors - their regulatory framework, profitability of domestic investment etc.- along with the political and economic conditions of the host countries - political stability, economic policies of the government, the health of the host economy reflected in the rate of inflation, balance of payments position, exchange rate, growth rate, overall macroeconomic stability etc. together with the global factors like peace and security, financial stability, general economic progress are the deciding and determining factors of investment.

The crux of the problem of the developing countries, is lack of development which is mainly associated with scarcity of capital. This fact makes foreign investments relevant and significant. Hence foreign investment because of its gigantic size and non-debt quality ought to have prima facie impact on the economies of the host countries and these investments have a vital role to play in the host economy which prompt the governments to liberalize their economies to facilitate and attract free flow of foreign investments.

The first and foremost as well as the most explicit impact of foreign investment lies in its capacity to maintain a favorable balance of payments (BOP)<sup>4</sup>. The import of the developing countries always weigh more and this leads to their chronic current account deficit (CAD) and unfavorable balance of payments. Hence financing these deficits is a major economic challenge faced by these countries. The inflow of foreign investments helps to fill the deficit of the current account. It is in this context that foreign investment is expected to

government bonds, corporate bonds, convertible securities, infrastructure securities etc. of another country. The class of investors who make investment in these securities are known as foreign portfolio investors. In India any single investor or investor group cannot exceed holding 10% of the equity of an Indian company, beyond which it will be treated as FDI.

<sup>&</sup>lt;sup>4</sup>According to IMF, balance of payments of a country is a systematic record of all economic transactions between its residents and the residents of the rest of the world during a specified accounting period.

play decisive role in the economy of the host countries. That is why countries nowadays see foreign investment as a panacea for their balance of payment problem.

Like the balance of payments, foreign investment is destined to play a crucial role with regard to Foreign Exchange Reserves (FER)<sup>5</sup> as well. Accumulation of foreign exchange reserves takes place due to several reasons - foreign investments, consistent positive balance of trade, high export rate etc. and among these as can be seen later, foreign investment is the most prominent contributing factor in countries like India. A strong foreign exchange reserve, enables the nation to survive in the event of a sudden economic break down, prevents depreciation of domestic currency, regulates exchange rate and is the symbol of the financial health of a country. Thus, by contributing to the foreign exchange reserves, foreign investments have both a direct and indirect bearing upon the economy of the country.

Besides, countries which attract large capital inflows through foreign investments will witness an appreciation of its own domestic currency or Exchange Rate  $(ER)^6$  as its demand rises and will be financially stronger than the other nations. Countries which have strong foreign exchange reserves tend to attract further foreign investments by the exhibition of its own financial strength. Just as a rich man's power transcends mere purchasing power and spreads to all other spheres of the society, foreign investment and the consequent non debt capital, have a positive impact on balance of payments, foreign exchange reserves, stability of exchange rate and the other aspects of the economy directly or indirectly. For example, foreign investment has an impact on the wholesale price index (WPI)<sup>7</sup> of the host country. The huge amount of foreign investment into the country creates a lot of demand for domestic currency and as a consequence the central bank is forced to issue more. This in its turn leads to excess liquidity in the market thereby leading to inflation.

<sup>&</sup>lt;sup>5</sup>Foreign Exchange Reserves (FER) are the foreign currencies held by a country's central bank. They are also called foreign currency reserves or FX reserves.

 $<sup>^{6}</sup>$ Exchange Rate (ER) is the price of one currency in terms of another currency. Since US dollar is the dominant currency of the world, generally exchange rate is linked with US dollar.

<sup>&</sup>lt;sup>7</sup>Wholesale Price Index (WPI) is a price index which represents the wholesale price of a basket of goods over time. It is the proxy for measuring inflation (Base Year 2004-05).

Foreign investment has also the potential to influence the economic growth<sup>8</sup>. It can boost saving and investment of the host economy that leads to stimulate growth of the host countries. Developing countries suffer from the problem of low saving, low investment, and low growth. This low level cumulative causation can be broken only by supplementing domestic saving with foreign saving. A strong argument in favor of foreign investment is that foreign savings supplement domestic savings. Foreign investment helps to bridge the gap between domestic saving and domestic investment, that leads to accelerate economic growth. Higher saving steps up investment and economic growth. Promoting growth in a developing country like India it is necessary to augment the domestic savings. Foreign investment contributes to economic growth through an increase in productivity by providing new investments, better technologies and managerial skills to the host countries.

The policy makers all over the world accept that foreign investment enhances productivity of host countries. In developing countries which properly utilize foreign investment especially FDI, there is an increase in job opportunities, per capita income and in the GDP rate which ultimately results in higher standards of living. These benefits, together with its direct financing of capital, suggest that foreign investment has a very important place in modernizing the national economy and promoting economic development. FDI has become one of the effective methods of siphoning capital flows from the foreign sources. It turned out to be significant for the developing countries to reinforce their capital base. Various studies have proved that FDI inflows make a significant positive impact on economic growth of most of the developing economies. FDI also improves productivity, generates employment, expands export and transfers sophisticated technologies to the sectors and countries that require them the most.

The theories of modernization propose that the capital investment through FDI inflows in various sectors of an economy fosters economic growth. Countries that have well-developed financial system grow significantly from FDI inflows. Similarly the performance of Foreign Institutional Investors (FIIs), the domi-

<sup>&</sup>lt;sup>8</sup>Index of Industrial Production (IIP) is usually used as a proxy for measuring growth rates in real sector. One of the main reasons why the IIP was considered to be a good proxy for GDP was that the value added by industrial production represented a substantial share of GDP. The growth in the index of industrial production indicates an escalation in the production of manufacturing goods such as mining, engineering goods etc. (Base Year 2004-05).

nant player of the FPI, leads to the rapid rise of the capital market and the consequent augmentation of the wealth of the investor. This positive wealth effect also often leads to higher consumption and greater demand for other asset classes such as gold, real estate etc. which, in turn, directly or indirectly fuels economic growth. Thus foreign investment can fill the savings investment gap and provide the foreign exchange to support growth and development. The contribution of foreign investment to growth can be direct through the financing of investment, which is invariably a source of growth, or indirect through an increase in consumption or absorption, which in turn will induce an increase in investment. The developmental impact is the greatest in the case of direct financing of investment.

Again, foreign investment can initiate some sort of a chain action in the host economy and can bring about a series of benefits to it. The inflow of foreign investment can provide capital to the developing countries i.e., non-debt creating source of capital. The increased inflow of foreign capital increases the allocative efficiency of capital of the host economy and can induce financial resources to flow from capital abundant countries to capital scarce countries. The flow of resources into the capital scarce countries reduces their cost of capital, increases investment, enhances the competitiveness of domestic enterprises and raises output. Some forms of foreign investment, such as venture capital, primary equity issues (on the domestic or international capital markets) and corporate bonds can make a valuable direct contribution to the financing of investment. Other forms of foreign investment such as purchases by foreigners of securities on domestic secondary markets, most of government bonds and derivatives have rather an impact on domestic wealth and absorption. This will increase consumption through two channels. First, the positive wealth effect generated by the increase in asset prices could encourage an increase in consumption by wealth holders. Secondly, portfolio asset purchases from residents increase bank liquidity and encourage a credit boom which can also increase investment through the accelerator effect. Besides, foreign investment especially FDI has played an important role in the process of globalization during the past two decades. The rapid expansion of FDI by multinational enterprises (MNEs) since the mid-eighties may be attributed to significant changes in technologies, liberalization of trade, investment regimes, and deregulation and privatization

of markets in many countries including developing countries like India. Fresh investments, as well as mergers and acquisitions, (M& A) play an important role in the cross-country movement of FDI. Thus FDI plays an important role in the transmission of capital and technology across home and host countries.

Similarly FPI can impact the economy in certain unique ways. It is in and through the capital market that FPI plays its role in the general economy. Capital market is the backbone of an economy and foreign investment has the potential to influence tremendously the capital market. Thus capital market is the basement of the FPI from and through which the latter acts in the economy. In fact what the capital market gains or losses from FPI trickles down to the economy and spread all over it. Therefore an analysis of the role of the FPI in the capital market must be supplemented to clarify the impact of foreign investment on the economy as a whole.

Throughout the world FPI inflows and outflows have direct impact on the rise and fall of capital market indices of the host economy. It is argued that FPI, especially FIIs by increasing the trading volume, reduces the transaction costs and thereby improves market efficiency. It also imparts greater liquidity to the capital market. Introduction of foreign investment in the capital market necessitates and accompanies introduction of online trading system, derivative trading etc. which will further lead to the increase of liquidity and turnover in the capital market. Thus higher FPI flows create more wealth through higher asset prices. In other words when the FPI flows are high the market tends to rise rapidly, creating more wealth for the investor. These roles of FPI in the capital market and economy takes place in the following way.

The most important way foreign investment especially foreign portfolio investment affects the economy is through its various linkage effects via the domestic capital market. It is argued that the most important benefits from foreign investment in the capital market is that it gives an upward thrust to the domestic stock market prices. This has an impact on the price-earnings ratio (P.E. Ratio) of the firms. A higher P.E. Ratio leads to a lower cost of finance, which in turn can guide to a higher quantity of investment. The lower cost of capital and a booming share market can encourage new equity issues. FPI also has the virtue of stimulating the development of the domestic stock market. The catalyst for this development is competition from foreign financial institutions. This competition necessitates the importation of more sophisticated financial technology, adaptation of the technology to local environment and greater investment in information processing and financial services. The results are greater efficiencies in allocating capital, risk sharing and monitoring the issue of capital. This enhancement of efficiency due to internationalization makes the market more liquid, which leads to a lower cost of capital. The cost of foreign capital also tends to be lower, because the foreign portfolio can be more diversified across the national boundaries and therefore be more efficient in reducing country-specific risks, resulting in a lower risk premium. A welldeveloped stock market has its impact on the demand side also. It provides investors with an array of assets with varying degree of risk, return and liquidity. This increased choice of assets and the existence of a vibrant stock market provide investors with more liquidity and options, thereby inducing more savings. Increased competition from foreign financial institutions also paves the way for the derivatives market. All this, encourages more savings in equity related instruments. This, in turn, raises the domestic savings rate and improves capital formation.

FPI can also bring ancillary benefits through addition to the liquidity of domestic capital markets, thus favouring its development. It can also encourage the development of other financial intermediaries, thus strengthening the financial infrastructure and deepening the process of financial intermediation. FPI can also lead to more corporate governance, as more transparency and disclosure will be required from companies by foreign investors. Such developments on domestic capital markets can increase the amount of risk capital available for new enterprises. FPI can also bring non-financial benefits to the host economy by enhancing the business environment in which firms operate. All these point to the potential of the foreign investment to impact the host economy. The impacts wherever and whatever it may be, can be positive, negative or both. Same is the case with the impact of foreign investment on the economies of the host countries. The above said positive impacts of the foreign investments on the economy do not deny or ignore the negative and dangerous impact of foreign investment on the economies of the host countries. Excessive freedom to foreign capital may ultimately affect the economic sovereignty

of the host countries. According to critics foreign investment especially FDI is selling sovereignty to multinationals. The East Asian Economic Crisis<sup>9</sup>, as well as the happening in Russia and South American countries points out the dangers of unfettered freedom to import foreign capital. There are also fears that foreign firms might displace domestic monopolies, and replace these with foreign monopolies which may, in fact, create worse conditions for consumers. The critics of foreign investment not only refute the arguments in favor of foreign investment but also warn that foreign investment will cause more harm than good to the host economies.

History of foreign investments on several occasions have testified and justified the fears and criticisms levelled against foreign investments. One cannot approach the foreign investment without emphasizing its inherent risk like volatility, which has the potential to shatter the host economies. Foreign investment can be viewed as economic imperialism and modern version of capitalistic imperialism. One cannot deny that foreign investment is essentially private investment with the sole motive of profit and it will lead to the drainage of the wealth of the nations. The glorification of foreign investment raises two questions i.e., whether all the developed countries achieved development with the help of foreign investment and whether development of the underdeveloped countries without foreign investment is an unattainable dream.

### **1.1** Statement of the Problem

Opening of the doors of the Indian economy for foreign investment through liberalization and privatization was a turning point in the economic history of India. Though the economic condition of India during the last decades of the twentieth century was the compelling force behind her change of policy in

<sup>&</sup>lt;sup>9</sup>South Korea, Philippines, Malaysia, Indonesia, Thailand, Singapore, Hong Kong and Taiwan came to be known as the Asian Tigers due to their sustained growth over a long period of time. The early part of the 1990s saw huge capital flows into these economies. These capital flows led to massive investment and high growth in the economies. Suddenly, by mid 1990s the macroeconomic fundamentals, particularly the current account of these economies began to deteriorate. The crisis began with the crash of the Thai Baht, which led to a currency crisis in the Tiger economies. By the end of 1997, Malaysian ringitt, the Indonesian rupiah, the Philippine peso and the Korean won lost between 44 and 56 per cent of their values against the American dollar.

relation to foreign investment flows, it led to a large surge of foreign investment in the Indian economy. Even a layman can notice that foreign investment has already saved the Indian economy from the imminent balance of payments crisis, improved foreign exchange reserves, stabilized exchange rate system, improved overall economic performance etc. Modernization of India's capital market, increase of stock prices, increase of knowledge flow, increase of market efficiency etc. are also noticeable since the advent of foreign investment in the capital market and that too without any visible dangers to the economy so far. In the light of the above observations, there are many who argue that foreign investment flows are favorable to the Indian economy. But several others, citing the example of East Asian experience, Global Financial crisis etc. argue that foreign investment flows are harmful to the economy in the long run.

Thus, there is a need to assess the overall impact of foreign investment on Indian economy by analysing the impact of foreign investment on the balance of payments, foreign exchange reserves, exchange rate, economic growth, capital market etc. to arrive at scientific conclusion whether foreign investment is favorable or harmful to the Indian economy. This analysis will help to examine whether there exist a relationship between foreign investment and the above variables. There is also a need to examine the comparative impacts of FDI and FPI on the Indian economy and which form of foreign investment - whether FDI or FPI is more conducive for the Indian economy.

### **1.2** Significance of the Study

Globally foreign investment is an ongoing phenomenon which touches and influences not only economy but also the whole political system of the country. This study attempts to evaluate foreign investment in India. Hence it has great significance not only for academicians but also for policy makers. This study also points out the pros and cons and the risks of foreign investment involved in India and proposes to point out some remedial measures to tide over such risks.

Similarly liberalization which began in 1991 and which paved the way for foreign investment in India, is a major policy shift in India which had been

committed almost to a closed economy and socialistic pattern of society since independence. More than a quarter of the century - which is neither too short nor too long to make an assessment of foreign investment on an economy has passed since India's large scale contact with foreign investment. Hence this study is timely and relevant. It is not denying that academic world is abound with researches and studies related to foreign investment in India. But comprehensive studies are few and far between. Majority of them, for the sake of specialization focuses on either one of the channels of foreign investments i.e., foreign direct investment or foreign portfolio investment. In order to get a comprehensive view of foreign investment, its two channels must be studied side by side giving due weightage to both because either FDI or FPI is not a true sample of foreign investment in India. Both are distinct in several ways for reasons well known. One who concentrates on FDI is likely to go unnoticed the volatility of foreign investment and may arrive at wrong conclusion related to foreign investment in India. Similarly another who concentrates on FPI is likely to give undue importance to the volatility of foreign investment and may come to wrong conclusions related to foreign investment in India ignoring foreign direct investment in India having more or less permanent nature. This is a strenuous attempt to cover the whole aspects of foreign investment i.e., Foreign Direct Investment and Foreign Portfolio Investment.

Apart from these, this study may have theoretical significance too. Economic underdevelopment is a chronic illness which the world faces today and economists strive to put forward certain growth models. Foreign investment, if found to have consistent, substantial and positive impact on the Indian economy, can lead to the development of a new growth model i.e., a growth model based on foreign investment.

### **1.3** Objectives of the Study

The present study "Impact of Foreign Investment flows on Indian Economy in the Post Liberalization Era" is undertaken with the following specific objectives:

- To analyze the structure, composition and trends of foreign investment in India.
- To identify the macroeconomic determinants of foreign investment in India.
- To examine the impact of foreign investment on the macroeconomic variables of Indian economy.
- To study the impact of foreign investment on the capital market of India with special reference to volatility.
- To make a comparison between the impact of foreign direct investment and foreign portfolio investment on the Indian economy.

# 1.4 Research Methodology

The crucial issue of this study as well as foreign investment in India is that whether the foreign investment flows has achieved the desired effect or not. Thus the crux of the problem of the study - as its title reveals - is the impact of foreign investment flows on the Indian economy. Hence the methodological issues involved in this study are how to study an economy and how to measure the impact of some phenomena like foreign investment on it. The first issue is attempted to resolve by studying the impact of foreign investment on the major macroeconomic variables of the Indian economy. Because the study of an economy is nothing other than the study of its macroeconomic variables as the former is essentially an entity emerged out of the totality of the later. These variables are used as some sort of checklist in relation to the impact of foreign investment and the universally accepted majority principle is followed to decide the impact of foreign investment on the Indian economy as a whole. That is if majority of the variables show positive impact of foreign investment it is inferred that the impact of foreign investment on Indian economy is positive and vice versa. It is true that the aforesaid approach must be followed only with ample caution because such an approach may prove correct only if all the macro economic variables are equals and deserve equal weightage which in fact is not the case. In other words here too the majority principle may not be infallibly

true. For example even if majority of the variables show a positive impact of foreign investment and with regard to particular variable say for example, inflation, if the foreign investment is found highly adverse, it will not be fair to conclude that foreign investment has a positive impact on the Indian economy. On the contrary, if majority of the variables show positive impact and minority of the variables show only insignificant impact or moderately adverse impact it may be possible to conclude that foreign investment has a positive impact on Indian economy.

Then the problem, the second issue, arises how to study and measure the impact of foreign investment on the macroeconomic variables. This problem is resolved by examining, mainly with the help of econometric tools, whether there exist a relationship between foreign investment and the above variables on the assumption that existence of relationship implies existence of impact - positive or negative and the more strong the relationship, the more will be the impact. Accordingly if foreign investment shows positive or negative relation with the majority of the macroeconomic variables studied, it is assumed that the impact of foreign investment on Indian economy is positive or negative respectively unless the minority of the variables, as already mentioned, stand exceptionally apart.

#### 1.4.1 Sources of Data

The period of the study covers twenty seven years from 1991-92 to 2017-2018 and the data required for the study is mainly collected from secondary sources. The data related to capital flows made by the FIIs, Global Depositary Receipt and American Depositary Receipt, Offshore Funds, FDI flows such as Equity Capital, Reinvested Earnings and Other Capital etc. are collected from RBI Bulletin, Handbook of Statistics on Indian Economy and Indian Securities Market Review. The data related to current account deficit, foreign exchange reserves, exchange rate, wholesale price index, and index of industrial production are gathered from the Reserve Bank of India Annual Report, Handbook of Statistics on the Indian Economy, Report on Currency and Finance and RBI Database. Data relating to foreign investment in the form of foreign direct investment, foreign portfolio investment, and debt flows are also taken from RBI Database. In addition to these data, the data about the movement of BSE Sensex and Nifty indices, market capitalization, turnover ratio, P.E. Ratio etc. are collected from the Annual Report of SEBI.

#### 1.4.2 Data Analysis

The analysis of the data is made with the help of descriptive and inferential statistics.

- Growth of foreign investment flows (FDI and FPI) is measured in terms of Compounded Annual Growth Rate (CAGR).
- The Augmented Dickey Fuller (ADF) Unit Root Test is used to verify the stationary properties of the macro economic variables in India.
- Auto Regressive Distributed Lag (ARDL) Model is used to determine the macroeconomic determinants of foreign investment in India and to analyse the impact of foreign institutional investment on stock return.
- Akaike Information Criteria (AIC) is used for determining the optimal lag length of the models.
- For measuring the stability of the ARDL Model, Cumulative Sum (CUSUM) Test is used.
- Johansen Co-integration Approach is used to determine the number of co-integration equations among the variables of the model.
- Vector Error Correction Model (VECM) is used to estimate the short run dynamics and long run impact of foreign investment on the macroeconomic performance of India.
- Error Correction Model (ECM) is used to verify short run dynamics with long-run equilibrium of the model.
- Variance Decomposition is used to explain the extent to which a variable is influenced by the shocks in all the variables in the system. The Forecast Error Variance Decomposition is used to explain the proportion of the

movements of macroeconomic variable (dependent variable) in a sequence due to its own shock versus shocks to the other macroeconomic variables (independent variables).

- The Impulse Response Function (IRF) is used to show the dynamic responses of all the variables in the system to a shock or innovation in each variable.
- Granger Causality Test is used to analyse the impact of foreign institutional investment on stock market development indicators.
- GARCH and ARCH Models are used to analyse foreign investment volatility.
- Statistical techniques such as Range, Standard Deviation, Skewness and Coefficient of Variation are used for making descriptive analysis of the data and to measure the volatility and other characteristics of the data series.

## 1.5 Organization of the Study

**Chapter One**: Introduction - deals with the theoretical framework of the potential of foreign investment to impact Indian economy. It also discusses the objectives, significance, research methodology and limitations of the study.

**Chapter Two**: Review of Literature - is devoted for the survey of the literature related to the area of study. Though watertight compartmentalization is not possible, the literature review is presented in two categories - studies related to foreign direct investment and studies related to foreign portfolio investment.

**Chapter Three**: Structure and Composition of Foreign Investment in India is a cross section of the quantity and regulations of foreign investment in India since 1992. **Chapter Four**: Determinants of Foreign Investment in India - mainly concentrates on the empirical analysis of the macroeconomic determinants of foreign investment in India using Auto Regressive Distributed Lag (ARDL) model.

**Chapter Five**: Impact of Foreign Investment on the Macroeconomic Variables of Indian Economy - analyses the impact of foreign investment on the Indian economy with special reference to the impact of foreign investment on its macroeconomic variables like balance of payments, foreign exchange reserves, exchange rate, economic growth, inflation, external debt etc. with the help of Vector Error Correction Model (VECM).

**Chapter Six**: Impact of Foreign Investment in the Indian Capital Market - is devoted for the analysis of the impact of foreign investment on Indian Economy through the capital market, the major domain of foreign investment in India with special reference to volatility.

**Chapter Seven**: Findings and Conclusion - comprises the consolidated and summarized findings with a formal conclusion having the nature of observations, criticisms, suggestions etc.

# **1.6** Limitations of the Study

The very nature of the subject, non-availability of data etc. impose certain limitations on this study. First of all this study is an attempt to examine some sort of cause effect relationship - foreign investment as cause and impact on the economy as effect. As the case of all other social sciences such an attempt cannot be carried out with full accuracy. Because economy is a complex system where different factors, internal as well as external, mutually influence and interact. Therefore it is not possible to isolate or single out one among them like foreign investment and attribute its exclusive impact on the economy. What is possible is to arrive at certain trends. In this sense this study cannot claim to be fully accurate.

Another limitation of the study is the non-employment of comparative

method. Had comparisons of the impacts of foreign investment on different sectors, different periods (pre and post liberalization), between the intensity of the impact of FDI and FPI on Indian economy etc. were made this study could have produced more reasonable results.

Again since it is neither possible nor feasible to study the impact of foreign investment on all the variables and sectors of the Indian economy, only the flow of foreign investment and its impact to the economy as a whole is emphasized focusing on certain academically endorsed foreign investment sensitive variables and sectors of the economy. Yet the exclusion of sector wise analysis of the impact of foreign investment from the purview of this study remains to be its limitation.

Like manner, the absence of standardised data related to the foreign investment and macroeconomic variables might have limited the accuracy of the analysis in certain context especially in measuring the intensity of the impact of foreign investment.

Similarly the two main players of foreign investment i.e., FDI and FPI have varying and distinct characteristics like ownership, volatility etc. For reasons already pointed out separate analysis of the intensity of the impact of these different players on the economy could not be made. Instead it became necessary to content with the analysis of their combined or total impact on the economy. This too is a limitation of this study to a certain extent.